From: Kate Johnson To: Jim Smith

Date: 12/7/2004 8:10:21 AM

Subject: Re: Copper in water at Bear Canyon Mine

Hi Jim:

I guess I will leave that up to your discretion. Frankly, I can't remember exactly why we talked about copper at that time, although if the pH of the water went down at all I would think copper would be somewhat more soluble than lead, and would be detectable at the spring sooner. In reviewing their sampling history they did have one fairly high copper result, in October 1996, 172 ug/l, compared with the more usual result of less than 12 ug/l. So, there is copper in the system somewhere....

I don't think an analysis for copper would be much more expensive than running lead at the same time....

Kate

>>> Jim Smith 12/06/04 03:27PM >>>

At the meeting last August with DOGM, the water users, and Bear Canyon Mine personnel, you spoke of the need to monitor distribution systems for copper and lead. DOGM subsequently requested that the mine add copper and lead to the parameters at two sites, SBC-9A where the water leaves the mine and SBC-4, Big Bear Spring. The mine has submitted an amendment to their plan to monitor the mine discharge for lead, but not for copper, and no monitoring at the spring unless lead shows up in the mine discharge. I am going to continue to press for monitoring at SBC-4.

As the main concern is the 8,000 lbs of lead in the abandoned batteries, and there is no copper tubing, and as far as is known no significant source for copper inside the mine or in the water system up to SBC-9A, I don't feel pushing for monitoring for copper will be beneficial or productive. Am I taking too narrow of a view; is there a good reason to require copper monitoring at the point where the water exits the mine or at the spring?

James D. SMITH jimdsmith@utah.gov 801 538 5262